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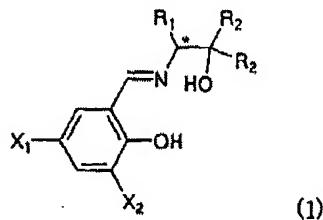
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Claim 1 (original)

1. An optically active salicylideneaminoalcohol compound of formula (1):



wherein R₁ represents

an alkyl group which may be substituted with a group selected from an alkoxy group, an aralkyloxy group, an aryloxy group and cycloalkoxy group,

an aralkyl, aryl or cycloalkyl group all of which may be substituted with a group selected from an alkyl group, an alkoxy group, an aralkyloxy group, an aryloxy group and a cycloalkoxy group,

R₂ represents

an alkyl group, a cycloalkyl group, or

an aralkyl or phenyl group which may be substituted with a group selected from an alkyl group, an alkoxy group, an aralkyloxy group, an aryloxy group and a cycloalkoxy group,

when X₁ represents a nitro group, X₂ is a hydrogen atom,

when X₁ represents a chlorine atom, X₂ is a chlorine atom, and

when X₁ is a hydrogen atom, X₂ is a fluorine atom; and

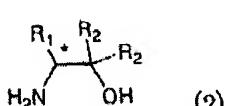
the carbon atom denoted by " * " is an asymmetric carbon atom having either an S or R configuration.

Claim 2 (original)

2. An optically active salicylideneaminoalcohol compound according to claim 1, wherein R₁ and R₂ are the same or different and independently represent an alkyl group, an aralkyl group, a phenyl group, a 2-methoxyphenyl group, a 2-tert-butoxy-5-tert-butylphenyl group or a 2-octyloxy-5-tert-butylphenyl group.

Claim 3 (original)

3. A process for producing an optically active salicylideneaminoalcohol compound as defined in claim 1, which comprises reacting an optically active amino alcohol of formula (2):



wherein R₁ represents

an alkyl group which may be substituted with a group selected from an alkoxy group, an aralkyloxy group, an aryloxy group and cycloalkoxy group,

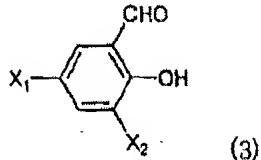
an aralkyl, aryl or cycloalkyl group all of which may be substituted with a group selected from an alkyl group, an alkoxy group, an aralkyloxy group, an aryloxy group, and a cycloalkoxy group,

R₂ represents

a hydrogen atom, an alkyl group, a cycloalkyl group or

an aralkyl or phenyl group which may be substituted with a group selected from an alkyl group, an alkoxy group, an aralkyloxy group, an aryloxy group and a cycloalkoxy group, and

the carbon atom denoted by " * " is an asymmetric carbon atom having either an S or R configuration, with a 2-hydroxybenzaldehyde derivative of formula (3):



wherein when X₁ represents a nitro, X₂ is a hydrogen atom,

when X₁ represents a chlorine atom, X₂ is a chlorine atom, and

when X₁ is a hydrogen atom, X₂ is a fluorine atom.

Claim 4 (original)

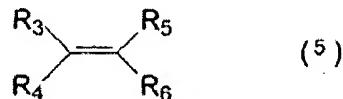
4. A process according to claim 3, wherein R₁ and R₂ are the same or different and independently represent an alkyl group, an aralkyl group, a phenyl group, a 2-methoxyphenyl group, a 2-tert-butoxy-5-tert-butyphenyl group or a 2-octyloxy-5-tert-butyphenyl group.

Claim 5 (original)

5. A chiral copper complex obtained by contacting a mono-valent or di-valent copper compound with an optically active salicylideneaminoalcohol compound as defined in claim 1 or 2.

Claim 6 (as amended)

6. (Amended) An adduct comprising a chiral copper complex as defined in claim 5 and a prochiral olefin of formula (5):



wherein R_3 , R_4 , R_5 and R_6 independently represent

a hydrogen atom,

a halogen atom,

a (C1-C10)alkyl group which may be substituted with a halogen atom or a lower alkoxy group,

a (C4-C8)cycloalkyl group,

an aryl group which may be substituted with a halogen atom or a lower alkoxy group, or

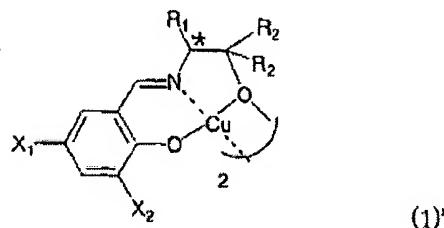
an alkoxy group; or

R_3 and R_4 , or R_5 and R_6 together form a cycloalkylene group having 2-4 carbon atoms, provided that one of R_3 , R_4 , R_5 and R_6 groups represents an alkenyl group which may be substituted with a halogen atom, an alkoxy group or an alkoxy carbonyl group, of which alkoxy may be substituted with a halogen atom or atoms, and

provided that when R_3 and R_5 are the same, R_4 and R_6 are not the same.

Claim 7 (original)

7. A method for producing a chiral copper complex of formula (1):



wherein R₁ and R₂ are the same or different and independently represent an alkyl group, an aralkyl group, a phenyl group, a 2-methoxyphenyl group, a 2-tert-butoxy-5-tert-butylphenyl group, or a 2-octyloxy-5-tert-butylphenyl group,

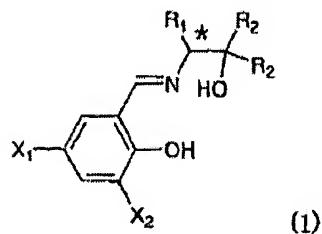
when X₁ represents a nitro group, X₂ is a hydrogen atom,

when X₁ represents a chlorine atom, X₂ is a chlorine atom, and

when X₁ represents a hydrogen atom, X₂ is a fluorine atom,

the carbon atom denoted by " * " is an asymmetric carbon atom having either an S or R configuration,

which comprises contacting a di-va lent copper compound, in an inert organic solvent, with a chiral salicylideneaminoalcohol compound of formula (1):



wherein R₁, R₂ X₁, X₂ and " * " respectively have the same meaning as defined above.

Claim 8 (original)

8. A method according to claim 7, which further comprises subjecting the resulting solution to precipitation and collecting the precipitated crystals of said chiral copper complex of formula (1)'.

Claim 9 (original)

9. A method according to claim 8, said precipitation is carried out by cooling the reaction solution or by adding an aliphatic hydrocarbon solvent.

Claims 10 and 11 (cancelled).

Claim 12. (NEW) A chiral copper complex obtained by the process consisting essentially of reacting a monovalent or divalent copper complex with an optically active salicylidene amino alcohol compound as defined in claim 1 or 2.